

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	784	(bikunin or aprotinin or kunitz) and ((cystinc adj fibrosis) or mucus or mucociliary or sputum or asthma or (chronic adj bronchitis) or bronchiectasis)	USPAT; US-PGP; UB; EPO; JPO; DERWEN T	2002/06/28 18:36
2	L2	2	(bikunin or aprotinin or kunitz) with ((cystinc adj fibrosis) or mucus or mucociliary or sputum or asthma or (chronic adj bronchitis) or bronchiectasis)	USPAT; US-PGP; UB; EPO; JPO; DERWEN T	2002/06/28 18:36

RESULT 1  
AAW30054  
ID AAW30054 standard; Protein; 92 AA.  
XX  
AC AAW30054;  
XX  
DT 20-APR-1998 (first entry)  
XX  
DE Human placental bikunin.  
XX  
KW Human; placental bikunin; inhibition; trypsin; kallikrein;  
KW plasmin; factor XIIa; treatment; prevention; oedema;  
KW inflammation; infection; granulomatosis; multiple sclerosis;  
KW ischaemia; perioperative blood loss; sepsis; shock; fibrosis;  
KW blood coagulation disease; polytrauma; stroke; haemorrhage;  
KW gastric cancer; cervical cancer; metastasis; blood loss.  
XX  
OS Homo sapiens.  
XX  
PN WO9733996-A2.  
XX  
PD 18-SEP-1997.  
XX  
PF 10-MAR-1997; 97WO-US03894.  
XX  
PR 04-OCT-1996; 96US-0725251.  
PR 11-MAR-1996; 96US-0013106.  
PR 14-JUN-1996; 96US-0019793.  
XX  
PA (FARB ) BAYER CORP.  
XX  
PI Davis G, Delaria KA, Marlor CW, Muller DK, Tamburini PP;  
XX  
DR WPI; 1997-470876/43.  
XX  
PT New human placental bikunin - used to inhibit kallikrein, trypsin  
PT etc. in treatment of oedema, multiple sclerosis, fibrosis, or  
PT perioperative blood loss  
XX  
PS Claim 1; Page 67; 110pp; English.  
XX  
CC The present sequence is a human placental bikunin, which  
CC inhibits, e.g. trypsin, kallikrein, plasmin and factor XIIa.  
CC Bikunin can be used to treat or prevent brain and spinal cord  
CC oedema, inflammation, infection or granulomatosis, multiple  
CC sclerosis, ischaemia, perioperative blood loss, sepsis, shock,  
CC fibrosis, blood coagulation diseases, polytrauma, stroke,  
CC cerebral or subarachnoid haemorrhage and gastric or cervical  
CC cancer and prevent metastasis. It is particularly useful for  
CC reducing blood loss during surgery, and can also be used to treat  
CC other cancer, arthritis, anaemia, non-insulin dependent diabetes,  
CC influenza and similar viral infections, acute pancreatitis and  
CC gout, and prevent pre-term labour. It has similar properties to  
CC aprotinin, but is less highly charged so should be less  
CC immunogenic and less likely to damage the kidneys. Manipulation  
CC of the bikunin sequence may allow the inhibitory profile to be  
CC altered. It also reduces or eliminates the need for whole donor  
CC blood or blood products during surgery, thereby reducing the risk  
CC of infection and other adverse side effects, as well as reducing  
CC the cost of surgery.  
XX  
SQ Sequence 92 AA.

Query Match 100.0%; Score 501; DB 18; Length 92;  
Best Local Similarity 100.0%; Pred. No. 6.7e-51;  
Matches 92; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ADRERSIHFCLVSKVVGRCRASMPRWYNTDGSCQLFVYGGCDNSNNYLTKEECLKK 60

Db 1 adrersihdfclvskvvgrcrasmprwwynvtgdscqlfvyyggcdgnsnnyltkeecikk 60  
Qy 61 CATVTENATGDLATSRNAADSSVPSAPRRQDS 92  
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Db 61 catvtenatgdlatsrnaadssvpsaprrqds 92

RESULT 2  
AAB14166  
ID AAB14166 standard; protein; 92 AA.  
XX  
AC AAB14166;  
XX  
DT 02-FEB-2001 (first entry)  
XX  
DE Human placental bikunin protein fragment # 6.  
XX  
KW Human; mucociliary dysfunction; mucus; sputum;  
KW chronic obstructive lung disease; chronic bronchitis; CB; Bronchiectasis;  
KW BE; asthma; cystic fibrosis; CF; bacterial infection; placental bikunin;  
KW Kunitz-type serine protease inhibitor; chronic sinusitis; glue ear.  
XX  
OS Homo sapiens.  
XX  
PN WO200037099-A2.  
XX  
PD 29-JUN-2000.  
XX  
PF 22-DEC-1999; 99WO-GB04381.  
XX  
PR 22-DEC-1998; 98US-0218913.  
PR 17-NOV-1999; 99US-0441966.  
XX  
PA (FARB ) BAYER AG.  
XX  
PI Hall R, Poll CT, Newton BB, Taylor WJA;  
XX  
DR WPI; 2000-452127/39.  
XX  
PT Stimulating mucociliary clearance rate of mucus and sputum in lung  
PT airways for treating lung diseases such as cystic fibrosis and  
PT bronchitis involves administering a Kunitz-type serine protease  
PT inhibitor -  
XX  
PS Claim 15; Page 90; 173pp; English.  
XX  
CC Mucociliary dysfunction is the inability of ciliated epithelium to clear  
CC mucus and sputum in lung airways. Mucociliary dysfunction is a serious  
CC complication of chronic obstructive lung diseases such as Chronic  
CC Bronchitis (CB), Bronchiectasis (BE), asthma and Cystic Fibrosis (CF).  
CC In addition, patients suffering from mucociliary dysfunction are  
CC susceptible to secondary bacterial infections. The present sequence is a  
CC fragment of human placental bikunin. Human placental bikunin is a  
CC Kunitz-type serine protease inhibitor protein, which can stimulate the  
CC rate of mucociliary clearance of mucus and sputum in lung airways.  
CC Therefore, the present protein fragment may be used for treating lung  
CC diseases such as CF, CB, BE, and chronic sinusitis and glue ear which  
CC are caused by retention and accumulation of mucus. The present sequence  
CC consists of residues 1-92 of the mature human placental bikunin  
CC protein sequence, which is described in AAB14159.  
XX  
SQ Sequence 92 AA;

Query Match 100.0%; Score 501; DB 21; Length 92;  
Best Local Similarity 100.0%; Pred. No. 6.7e-51;  
Matches 92; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 ADRERSIHDFCLVSKVVGRCRASMPRWYNTDGSCQLFVYGGCDGNNSNNYLTKEECLKK 60  
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Db 1 adrersihdfclvskvvgrcrasmprwynvtgdscqlfvyyggcdgnnsnnyltkeecclk 60  
  
Qy 61 CATVTENATGDLATSRNAADSSVPSAPRRQDS 92  
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Db 61 catvtenatgdlatsrnaadssvpsaprrqds 92